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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,187	10/21/2003	Isao Hanai	HIR-141	3666

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EXAMINER
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FERGUSON, MICHAEL P

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/690,187	<b>Applicant(s)</b> HANAI ET AL.	
	<b>Examiner</b> Michael P. Ferguson	<b>Art Unit</b> 3679	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 March 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on September 9, 2002. It is noted, however, that applicant has not filed a certified copy of the JP 2002-262311 application as required by 35 U.S.C. 119(b).

### ***Information Disclosure Statement***

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

### ***Drawings***

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the resin claimed in claims 4, 11, 13, 20, 22 and 26 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure

Art Unit: 3679

number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3, 5-10, 12, 14-19, 21, 23-25 and 27 are rejected under 35

U.S.C. 102(b) as being anticipated by Berk (US 2,047,992).

As to claim 1, Berk discloses a shock-absorbing guardrail comprising:

a guard fence **2** having a back; and,

a mid-filler attachment **15,16** having elliptical sides that irreversibly deforms after collision impact (inherently, mid-filler attachment **15,16** deforms when acted upon by a large enough force); and

Art Unit: 3679

an arm **16a** affixed to the mid-filler attachment **15,16** and affixed to the back of the guard fence (Figures 8 and 9).

As to claim 2, Berk discloses a guardrail comprising:

a connector **16b** for releasably affixing the arm to the back the guard fence **2** (Figure 9).

As to claim 3, Berk discloses a guardrail comprising:

a support post **1** affixed to the mid-filler attachment **16** (Figure 8).

As to claim 5, Berk discloses a guardrail comprising:

a shock-absorbing pipe **15,16** positioned between the guard fence **2** and the support post **1** (Figure 8).

As to claim 6, Berk discloses a guardrail wherein the mid-filler attachment **16** has an ohm-shaped cross-section (Figure 8).

As to claim 7, Berk discloses a guardrail comprising:

a large mid-filler attachment **16** having an ohm-shaped cross section with elliptical sides that irreversibly deforms after collision impact a mid-filler attachment **15,16** having elliptical sides that irreversibly deform after collision impact (inherently, mid-filler attachment **16** deforms when acted upon by a large enough force); and

a small mid-filler attachment **15** positioned within the large mid-filler attachment, wherein the mid-filler attachments are affixed to the back of the guard fence **2** (Figure 8).

As to claim 8, Berk discloses a guardrail comprising:

Art Unit: 3679

a connector **18** wherein the mid-filler attachment **15,16** releasably affixed to the support post **1** with the connector (Figure 8).

As to claim 9, Berk discloses a guardrail wherein the mid-filler attachment **15,16** undergoes irreversible deformation when the guard fence is impacted.

As to claim 10, Berk discloses a guardrail comprising:

a structure **1** selected from the group consisting of support poles, hydrants, semaphoric poles, bifurcations, anti-collision sections, sectional walls, walls at parking lots, concrete walls, light pole foundations, and loading docks wherein the structure is affixed to the guard fence **2** with the mid-filler attachment **15,16** positioned therebetween (Figure 8).

As to claim 12, Berk discloses a guardrail comprising:

a shock-absorbing pipe **15** positioned between the guard fence **2** and the structure **1** (Figure 8).

As to claim 14, Berk discloses a guardrail wherein the mid-filler attachment **16** has an ohm-shaped cross-section (Figure 8).

As to claim 15, Berk discloses a guardrail wherein the mid-filler attachment **15** has an open pipe shaped cross-section (Figure 8).

As to claim 16, Berk discloses a guardrail wherein the mid-filler attachment **15,16** is affixed to the structure **1** with connection parts **18** (Figure 8).

As to claim 17, Berk discloses a shock-absorbing guardrail for structures comprising:

a guard fence **2** having a back;

a big mid-filler attachment **16** having an ohm-shaped cross-section with elliptical sides that irreversibly deforms after collision impact a mid-filler attachment **15,16** having elliptical sides that irreversibly deform after collision impact (inherently, mid-filler attachment **15,16** deforms when acted upon by a large enough force); and

a small mid-filler attachment **15** positioned within the big mid-filler attachment, wherein the mid-filler attachments are affixed to the back of the guard fence (Figures 8 and 9).

As to claim 18, Berk discloses a guardrail wherein the small mid-filler attachment **15** is laminated (attached in layers) to the big mid-filler attachment **16** (Figure 8).

As to claim 19, Berk discloses a guardrail wherein the big mid-filler attachment **16** and the small mid-filler attachment **15** are arranged in layers (Figure 8).

As to claim 21, Berk discloses a guardrail comprising:

a structure **1** selected from the group consisting of support poles, hydrants, semaphoric poles, bifurcations, anti-collision sections, sectional walls, walls at parking lots, concrete walls, light pole foundations, and loading docks wherein the structure is affixed to the guard fence **2** with the mid-filler attachments **15,16** positioned therebetween (Figure 8).

As to claim 23, Berk discloses a guardrail comprising:

a shock-absorbing pipe **15** affixed to the back of the guard fence **2** (Figure 8).

As to claim 24, Berk discloses a method of producing a shock absorbing guardrail comprising:

providing a guard fence **2** having a back;

attaching a mid-filler attachment **15,16** having an ohm-shaped cross-section with elliptical sides that irreversibly deforms after collision impact a mid-filler attachment **15,16** having elliptical sides that irreversibly deform after collision impact (inherently, mid-filler attachment **15,16** deforms when acted upon by a large enough force) to the back of the guard fence (Figures 8 and 9).

As to claim 25, Berk discloses a method comprising:

attaching the mid-filler attachment **15,16** to a support post **1** so that the mid-filler attachment is positioned between the back of the guard fence **2** and the support post (Figure 8).

As to claim 27, Berk discloses a method comprising:

attaching the mid-filler attachment **15,16** to a structure **1** so that the mid-filler attachment is positioned between the back of the guard fence **2** and the structure (Figure 8).

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 4, 11, 13, 20, 22 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berk.

As to claim 4, Berk fails to disclose a guardrail comprising a shock-absorbing resin positioned between the back of the guard fence and the support post.

The applicant is reminded that the selection of a known material based upon its



Art Unit: 3679

suitability for the intended use is a design consideration within the skill of the art. In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a guardrail as disclosed by Berk to have a mid-filler attachment made of shock-absorbing resin as such practice is a design consideration within the skill of the art.

As to claim 11, Berk fails to disclose a guardrail comprising a shock-absorbing resin positioned between the guard fence and a structure.

The applicant is reminded that the selection of a known material based upon its suitability for the intended use is a design consideration within the skill of the art. In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a guardrail as disclosed by Berk to have a mid-filler attachment made of shock-absorbing resin as such practice is a design consideration within the skill of the art.

As to claim 13, Berk fails to disclose a guardrail comprising a shock-absorbing resin positioned between the guard fence and the structure.

The applicant is reminded that the selection of a known material based upon its suitability for the intended use is a design consideration within the skill of the art. In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a guardrail as disclosed by Berk to have a mid-filler attachment made of shock-absorbing resin as such practice is a design consideration within the skill of the art.

As to claim 20, Berk fails to disclose a guardrail comprising a shock absorbing resin positioned within the mid-filler attachments.

The applicant is reminded that the selection of a known material based upon its suitability for the intended use is a design consideration within the skill of the art. In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a guardrail as disclosed by Berk to have a small mid-filler attachment made of shock-absorbing resin as such practice is a design consideration within the skill of the art.

As to claim 22, Berk fails to disclose a guardrail comprising a shock-absorbing resin affixed to the back of the guard fence.

The applicant is reminded that the selection of a known material based upon its suitability for the intended use is a design consideration within the skill of the art. In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a guardrail as disclosed by Berk to have a mid-filler attachment made of shock-absorbing resin as such practice is a design consideration within the skill of the art.

As to claim 26, Berk fails to disclose a method comprising attaching a shock absorbing resin between the back of the guard fence and the support post.

The applicant is reminded that the selection of a known material based upon its suitability for the intended use is a design consideration within the skill of the art. In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960). Accordingly, it would have been

Art Unit: 3679

obvious to one having ordinary skill in the art at the time the invention was made to modify a method as disclosed by Berk to have a mid-filler attachment made of shock-absorbing resin as such practice is a design consideration within the skill of the art.

### ***Response to Arguments***

8. Applicant's arguments filed March 14, 2005 have been fully considered but they are not persuasive.

As to claims 1, 17 and 24, Attorney argues that Berk does not disclose a shock-absorbing guardrail comprising a mid-filler attachment having elliptical sides *that irreversibly deforms after collision impact*.

Examiner disagrees. As to claims 1, 17 and 24, Berk discloses a shock-absorbing guardrail comprising a mid-filler attachment **15,16** having elliptical sides that irreversibly deforms after collision impact (inherently, mid-filler attachment **15,16** deforms when acted upon by a large enough force; Figures 8 and 9).

### ***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 3679

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Ferguson whose telephone number is (571)272-7081. The examiner can normally be reached on M-F (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571)272-7087. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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